## § 98.165

(d) The owner or operator must document the procedures used to ensure the accuracy of the estimates of fuel and feedstock usage and sorbent usage (as applicable) in paragraph (b) of this section, including, but not limited to, calibration of weighing equipment, fuel and feedstock flow meters, and other measurement devices. The estimated accuracy of measurements made with these devices must also be recorded, and the technical basis for these estimates must be provided.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 79157, Dec. 17, 2010]

## § 98.165 Procedures for estimating missing data.

A complete record of all measured parameters used in the GHG emissions calculations is required. Therefore, whenever a quality-assured value of a required parameter is unavailable (e.g., if a meter malfunctions during unit operation), a substitute data value for the missing parameter must be used in the calculations as specified in paragraphs (a), (b), and (c) of this section:

- (a) For each missing value of the monthly fuel and feedstock consumption, the substitute data value must be the best available estimate of the fuel and feedstock consumption, based on all available process data (e.g., hydrogen production, electrical load, and operating hours). You must document and keep records of the procedures used for all such estimates.
- (b) For each missing value of the carbon content or molecular weight of the fuel and feedstock, the substitute data value must be the arithmetic average of the quality-assured values of carbon contents or molecular weight of the fuel and feedstock immediately preceding and immediately following the missing data incident. If no quality-assured data on carbon contents or molecular weight of the fuel and feedstock are available prior to the missing data incident, the substitute data value must be the first quality-assured value for carbon contents or molecular weight of the fuel and feedstock obtained after the missing data period. You must document and keep records of the procedures used for all such estimates.

(c) For missing CEMS data, you must use the missing data procedures in §98.35.

## § 98.166 Data reporting requirements.

In addition to the information required by §98.3(c), each annual report must contain the information specified in paragraphs (a) or (b) of this section, as appropriate, and paragraphs (c) and (d) of this section:

- (a) If a CEMS is used to measure  $CO_2$  emissions, then you must report the relevant information required under §98.36 for the Tier 4 Calculation Methodology and the following information in this paragraph (a):
- (1) Unit identification number and annual  $CO_2$  emissions.
- (2) Annual quantity of hydrogen produced (metric tons) for each process unit and for all units combined.
- (3) Annual quantity of ammonia produced (metric tons), if applicable, for each process unit and for all units combined
- (b) If a CEMS is not used to measure  $CO_2$  emissions, then you must report the following information for each hydrogen production process unit:
- (1) Unit identification number and annual  $CO_2$  emissions.
- (2) Monthly consumption of each fuel and feedstock used for hydrogen production and its type (scf of gaseous fuels and feedstocks, gallons of liquid fuels and feedstocks, kg of solid fuels and feedstocks).
- (3) Annual quantity of hydrogen produced (metric tons).
- (4) Annual quantity of ammonia produced, if applicable (metric tons).
- (5) Monthly analyses of carbon content for each fuel and feedstock used in hydrogen production (kg carbon/kg of gaseous and solid fuels and feedstocks, (kg carbon per gallon of liquid fuels and feedstocks).
- (6) Monthly analyses of the molecular weight of gaseous fuels and feed-stocks (kg/kg-mole) used, if any.
- (c) Quantity of  $CO_2$  collected and transferred off site in either gas, liquid, or solid forms, following the requirements of subpart PP of this part.
- (d) Annual quantity of carbon other than CO<sub>2</sub> collected and transferred off